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Health Education and Medical Research

I am very happy that I was asked to speak to you on this occasion. There are few subjects of greater importance than the health of the American people. And there are all too few opportunities to pay tribute to those whose lives are dedicated to this cause.

It is of course not by chance that this fall meeting of the New England Health Education Association coincides in time and place with another important gathering focused on the Nation's health. I understand that the Clinical Sessions of the American Medical Association are just concluded. I know that thousands of our physicians are leaving Boston refreshed and stimulated by what they have seen and heard. These meetings are a unique and indispensable means of giving practicing physicians new insight into the application of the latest knowledge to today's complex problems of health and disease.

To you, Dr. Hess, and through you to the men and women you represent in the practice of medicine, I would extend congratulations and good wishes. You serve our people well in challenging times. We look to you for leadership in meeting the health problems of today and in anticipating those of tomorrow. More and more of us will benefit in full measure from the knowledge and the skills you possess.

I would like to pay a special tribute to the guest of honor today, one who has pioneered in the field of public health. In his teaching and in his practice, Dr. Hiscock has helped shape the profession of public

health, and I am gratified that I can add my word of commendation to those he has already heard today.

You will forgive me, I know, if I refer for a moment to my state, the neighbor of Massachusetts to the south, Rhode Island. We Rhode Islanders are proud to be linked with the other New England states as the birthplace and the cradle of public health consciousness and action in the United States. And we are pleased and honored to be represented at this meeting by such outstanding people as John Farrell, George Kennedy, Mrs. Veronica Sullivan, and others whose work is well known to all of you.

My topic is "Health Education and Medical Research."

I am not a health educator. I have never done any medical research. It therefore would be inappropriate for me to attempt to define either health education or medical research in the presence of a group which includes professionals in both fields. It would be even more inappropriate for me to make suggestions as to how I think either one should be conducted.

However, particularly during the past 15 years, I have had a great interest in both medical research and health education. It has become necessary for me to know something about both in the course of my work. I have been privileged to be a member of a congressional committee which has had the responsibility of providing appropriations totalling hundreds of millions of dollars for medical research and health activities.

My qualifications to speak to you on these subjects, then, are those of a relatively well-informed layman, a legislator, and a citizen who has the same stake in medical research and health education as have all of our 165 million citizens. In this sense, I can give you the "practical" working views of a legislator and a citizen who may be regarded as more or less typical of the public as a whole.

The public has great faith in medical research. And so the public supports medical research, to the extent of millions of dollars each year, given directly to voluntary health organizations, or appropriated from public funds raised by taxes. The public encourages medical research, and sometimes attempts to push it farther and faster than research itself can go. New ways to prevent disease, to cure disease, and to prolong life are the final payoff of medical research, and the results are what the public understandably and properly expects from medical research. Each new discovery is greeted with public acclaim, followed by expectation of even greater and more difficult achievements.

The hypothetical average man does not see the part of the research iceberg that is under water - the long patient search for basic knowledge, the slow accummulation of facts, the rigorous training process, the interdependence of the sciences, and the interweaving of research and higher education. All of these underlying factors that are taken for granted by scientists and educators are understandably of little or no concern to the average person.

The average practical man in the United States has a faith in education more deep-rooted and possibly even stronger than his faith in medical research, and he makes demands upon education as great as,

or even greater than his demands upon research. Our average practical man has little technical knowledge of health education as known to professional health educators. He may not even be familiar with the term itself. But he has at least an unformulated awareness of it in which are blended many of his feelings and ideas about both health and education. This combination carries with it faith, expectations, and demands which are tremendous.

Once some new information has been produced by research and translated into usable medical knowledge by way of clinical investigation, all the good things that follow from there on are the result of a number of processes which our practical citizen is likely to look upon collectively as health education. This very simplified concept would see all medical education, professional education, health department activity and the work of the professional health educator as parts of health education. The practical man, holding these simple views, is probably no more concerned with the views of professional health educators on the meaning of health education than with the views of research workers on the meaning of research. Results are what he expects from both groups, and the process by which results are achieved is secondary to him.

These over-simplified views of the ordinary citizen have a certain basis in reality. During recent years the public has seen millions of dollars invested in medical research. They have seen results come from research which have made possible great advances in individual and public health--advances which understandably have led to the popular use of

such words as "wonder drugs" and "miracle drugs." They have seen vast nation-wide campaigns which have saved thousands of lives....not just abstract statistical lives, but the lives often of members of their own families, or of their neighbors.

For example: during the past 15 years I have watched research, health education, and medical and public health practice make phenomenal gains over two dreaded diseases, syphilis and tuberculosis. These changes have been so far-reaching that they have profoundly affected the health profile of our country. And today the entire world is watching, as though from the sidelines of a football game or from seats in a theater, each dramatic development that appears to be leading rapidly toward the control of another much-feared disease, poliomyelitis. The average citizen sees this simply as another new weapon against disease, produced by medical research, and widely applied through familiar public health methods which he associates with health education.

Less dramatic, less widely known as yet, is the potential control of rheumatic fever and rheumatic heart disease. But already the public is becoming aware of the fact that rheumatic fever can be prevented by the treatment and prevention of streptococcal infections. Research has provided the information, health education is spreading it and achieving its application.

The public is also aware of recent discoveries of drugs that have had extraordinary effects, occasionally dramatic, on some patients with mental illness. This they accept as another result of research, and they are confident that research will pursue these new clues, or as yet undiscovered clues, and dig out information which will lead to more and better control of mental illness.

The public further is aware that medical research has made at least small scratches on the hard surface of the problem of cancer; the public is confident that research ultimately will find more useful facts about the cause of cancer, its prevention, and its cure. The public is equally confident that health education will keep all of the people informed of the progress and will bring them the ultimate application of this information by way of the medical profession, health departments, and all of the other health education processes whereby research discoveries become daily health realities.

Similarly, the public realizes that atherosclerosis, the disease which causes more deaths than any other, can be controlled only when

research has found answers to the questions of cause and prevention, and when such answers have been made widely known.

These ideas of medical research and health education may be oversimplified and over-optimistic. But whether they are or not, I believe they represent the ideas of the great bulk of our population. They exist partly because they express the wishes and hopes of the people, partly because of what medical research has done for them in the past, and partly because of what health education has taught them to believe.

If, for sake of definition, we accept the fact that health education is all of the processes of communication, individual and collective, by which research is transformed into improved public health, it becomes crystal clear that health education is an integral part of medicine itself, and that the physician is the keystone. He is the most eloquent and persuasive of all health educators, as he pursues his task of helping people achieve health and prevent disease.

Nonetheless, the physician should be--and, I imagine, is--the first to emphasize the essentiality of his professional colleagues--the nurse, the social workers, the health educator.

There is another relationship which should be explored--that between health education and medical research. Just as the physician and the health educator are allies, so it is--or should be --with the scientist and the health educator.

The scientist publishes findings in professional journals or at professional meetings. The scientific world seizes his findings, digests , evaluates and verifies them, using them in large measure for further research. This is as it should be. But gradually from research emerges a technique, a drug, a treatment which is ready to move into clinical trial and finally to general use. It is here, as I understand it, that health education moves to the forefront, for communication becomes the essential ingredient in this transition. The knowledge yielded by research must be communicated to the professional world, and to the general public, and everyone in the total spectrum of the health profession bears a share of the obligation to conduct this educational program successfully.

I promised earlier that I would resist any inclination I might feel to comment on matters of professional judgment in your field.

May I make one partial exception to that? There is one particular thing which I feel very strongly and deeply, and I would like to share it with you.

It has to do with the pace at which knowledge that can be applied is increasing.

You know, as I do, that medical research is continuing to provide new and significant data about health and disease. Since the war, the volume of medical research in this country has increased about five-fold as we have begun to face up to some of the issues posed by chronic illness.

And facts are beginning to become available--bits and pieces of information that are not answers, in themselves, but that suggest with a high degree of certainty that answers will be forthcoming.

This means that the health education burden will continue to grow in size and importance. Already we see some of the signs. There are things that can be done to treat some forms of heart disease, some tests that promise to be of value in cancer diagnosis, some drugs and techniques that are useful in the treatment of mental illness. There are measures to keep diabetes under control, to ease the suffering of arthritics, to improve by rehabilitation the status of the victims of various neurological disorders. Thus, in net effect, the pool of information which demands application is growing, and will continue to grow. Yet already, it would appear, the demands on health education are great...perhaps, in part, because it can never be assumed that any problem in education can become a closed book. The lessons have to be repeated over and over again, in different ways for different audiences, in order to keep the message alive.

In this, it seems to me, lies the great challenge to all of us whose mission in whole or in part is better health for more people. It is to find ways to strengthen health education in all of its forms and for all of its audiences, so that instead of falling behind in the race between knowledge and application, we can progressively narrow the gap, so that ultimately there will be a minimum of lag in the broad application of health measures.

This challenge, if it is to be met, imposes obligations on all of our society. It is meetings such as this which give one faith that the challenge can and will be met. And if the breadth and the extent of the problems seem enormous, it must be remembered that both our resources and our resourcefulness are great.

If we look at it as a chemical reaction, with research fed into the process and with health as the end product, we can see that health education is the catalyst, the force without which the reaction will not take place. The catalyst will work only if each group, and each individual within each group, does a share of the job carefully and well, and in complete harmony with all others of common purpose.

To you, Dr. Hiscock, and to you, Dr. Hess, and to all of you whose lives and work are linked with the preservation of health and the prevention and treatment of disease, I would convey a message of courage and hope. Americans, and people all over the world, are grateful to you for what you do.